REMARKS/ARGUMENTS

In view of the remarks and arguments presented below, Applicant believes the pending application is in condition for allowance.

I. Status of the Claims

Claims 3, 4, and 9-12 were previously pending.

Claims 1, 2, and 5-8 were previously canceled without prejudice to or disclaimer of the subject matter contained therein.

New claim 13 is added. It depends from claim 3 and adds the limitation that "the second active ingredient has coarser particles than the first active ingredient." Support for claim 13 can be found, for example, in canceled claims 1 and 5. Specifically, claim 1 as originally filed recited "a second active ingredient which is pulverized into coarser particles than said first active ingredient by dry milling," and claim 5 as originally filed recited "the dry second active ingredient having coarser particles than said first active ingredient." No new matter is introduced by claim 13.

Upon entry of this Response, claims 3, 4, and 9-13 are pending and at issue.

II. Rejection of Claims 3, 4, and 9-12 under 35 U.S.C. § 103(a) over Suzuki in View of Hoy

Claims 3, 4, and 9-12 are rejected under 35 U.S.C. § 103(a) as unpatentable over United States Patent No. 5,980,926 to Suzuki et al. ("Suzuki") in view of United States Patent No. 5,208,030 to Hoy et al. ("Hoy"). The Examiner contends that Suzuki in combination with Hoy renders these claims obvious. Applicant respectfully traverses the rejection.

Claim 3 recites a process for producing a water dispersible granule formulation, in which the water dispersible granule formulation contains both an active ingredient pulverized under wet milling and an active ingredient pulverized under dry milling.

According to the Examiner, Suzuki teaches a method of making a water dispersible granule formation by using "WDG-SC" with an average size of 1.5 μm, which is produced by admixing an active agent, a wetting and dispersing agent, and water and subjecting the mixture to wet

granulation. Further, according to the Examiner, Hoy teaches dry milling at least one active ingredient, a wetting/drying agent, and a mineral carrier, to an average size of less than 5 μm. However, the object of Suzuki is to provide a water dispersible granule that has good dispersibility, good granulation property, and good suspension stability, and to provide increased initial activity. On the other hand, the object of Hoy is to promote "effective, accurate and even distribution"[1] of the active ingredient.

In contrast, the object of the present invention is to provide a water dispersible granule formulation that can enhance both the initial activity and the residual activity of an active ingredient contained in the formulation. It was discovered for the first time in this invention that the coexistence of an active ingredient pulverized under wet milling and an active ingredient pulverized under dry milling achieves this object.

Therefore, Applicant respectfully submits that it would not have been obvious to one of ordinary skill in the art to have an active ingredient pulverized under wet milling and an active ingredient pulverized under dry milling coexist, as recited in claim 3, in order to enhance both the initial activity and the residual activity of an active ingredient contained in the formulation.

Furthermore, in Examples 1, 5 and 6 of the present Specification, both an active ingredient pulverized under wet milling and an active ingredient pulverized under dry milling are used. On the other hand, in Comparative Examples 1 and 5-8, either one of an active ingredient pulverized under wet milling or an active ingredient pulverized under dry milling (but not both) is used. Comparison of these Examples and Comparative Examples shows that the process recited in claim 3 achieves unexpected, superior effects over conventional practice.

Thus, as shown in Table 3, the water dispersible granule formulation obtained in Comparative Example 1 (in which only the active ingredient pulverized under wet milling was used) exhibited a remaining ratio of 44% after 6 hours of sunlight irradiation. In contrast, the water dispersible granule formulation obtained in Example 1 exhibited a remaining ratio of 89% after 6 hours of sunlight irradiation.

---

[1] Hoy, column 6, line 33.

In addition, as shown in Table 4, when the water dispersible granule formulation obtained in Comparative Example 5 (in which only the active ingredient pulverized under wet milling was used) was sprayed at the concentration of 12 ppm, the residual effect was 0%. In contrast, when the water dispersible granule formulation obtained in Example 5 was sprayed at the same concentration of 12 ppm, the residual effect was 20%. Furthermore, when the water dispersible granule formulation obtained in Comparative Example 6 (in which only the active ingredient pulverized under dry milling was used) was sprayed at the concentration of 3 ppm, the initial activity was 50%. In contrast, when the water dispersible granule formulation obtained in Example 5 was sprayed at the same concentration of 3 ppm, the initial activity was 95%.

Moreover, as shown in Table 5, when the water dispersible granule formulation obtained in Comparative Example 7 (in which only the active ingredient pulverized under wet milling was used) was sprayed at the concentration of 50 ppm, the residual effect was 20%. In contrast, when the water dispersible granule formulation obtained in Example 6 was sprayed at the same concentration of 50 ppm, the residual effect was 85%. Furthermore, when the water dispersible granule formulation obtained in Comparative Example 8 (in which only the active ingredient pulverized under dry milling was used) was sprayed at the concentration of 3 ppm, the initial activity was 19%. In contrast, when the water dispersible granule formulation obtained in Example 6 was sprayed at the same concentration of 3 ppm, the initial activity was 80%.

Applicant respectfully submits that these effects, exhibited by the coexistence of the active ingredient pulverized under wet milling and the active ingredient pulverized under dry milling, are unexpected from and superior to what Suzuki and Hoy teach or suggest, either alone or in combination.

At least for these reasons, Suzuki in view of Hoy does not render claim 3 obvious. Applicant respectfully requests that the rejection of claim 3 be withdrawn.

Claims 4, 9, and 10 depend from claim 3. Therefore, at least for the same reasons as stated above for claim 3, Suzuki in view of Hoy does not render any of these claims obvious. Applicant respectfully requests that the rejection of claims 4, 9, and 10 be withdrawn.

Although claims 11 and 12 are written in independent form, they each recite subject matter that adds further limitation to the subject matter of claim 3. Specifically, claim 11 adds to claim 3 the limitation that "[not only the second active ingredient but also] the first active ingredient is an agricultural chemical selected from the group consisting of an insecticide, a fungicide and a herbicide." And claim 12 adds the limitation that "the first and the second active ingredients are independently selected from a group consisting of [a list of specific insecticides, fungicides, and herbicides]" where claim 3 simply recites "the second active ingredient is an agricultural chemical selected from the group consisting of an insecticide, a fungicide and a herbicide."

Therefore, at least for the same reasons as stated above for claim 3, Suzuki in view of Hoy does not render claim 11 or 12 obvious. Accordingly, Applicant respectfully requests that the rejection of claims 11 and 12 be withdrawn.

III. New Claim 13

New claim 13 depends from claim 3. Therefore, at least for the same reasons as stated above for claim 3, claim 13 is patentable over Suzuki and Hoy, either alone or in combination.

Further, claim 13 recites that "the second active ingredient has coarser particles than the first active ingredient." Applicant respectfully submits that neither Suzuki nor Hoy teaches or suggests this element. For this additional reason, claim 13 is patentable over Suzuki and Hoy, either alone or in combination.

CONCLUSION

In view of the foregoing, it is believed that claims 3, 4, and 9-13 are in immediate condition for allowance and it is respectfully requested that the application be reconsidered and that all pending claims be allowed and the case passed to issue.

If there are any other issues remaining which the Examiner believes could be resolved through a Supplemental Response or an Examiner's Amendment, the Examiner is respectfully requested to contact the undersigned at the telephone number indicated below.

Dated: October 14, 2008

Respectfully submitted,

By _____
Louis J. DelJudice
Registration No.: Reg. No. 47,522
DARBY & DARBY P.C.
P.O. Box 770
New York, New York 10008-0770
(212) 527-7700
(212) 527-7701 (Fax)
Attorneys/Agents For Applicant